Amendment to the Specification:

Please replace paragraph [0022] with the following amended paragraph:

[0022] In step 106, the software determines a weighted orange-red value of each pixel in image 10. The weighted orange-red value represents the likelihood that a pixel is an orange-red pixel that forms part of a red eye. In one embodiment <u>for the rgb color space</u>, the weighted orange-red value for a pixel is determined from its red, green, and blue color values as follows:

$$f_2 = \frac{c_1^{(2)} r + c_2^{(2)} g + c_3^{(2)} b}{Y}, \tag{4}$$

where f_2 is the second type of weighted red value, $c_1^{(2)}$ is a weight given to the red color value, $c_2^{(2)}$ is a weight given to the green color value, and $c_3^{(2)}$ is a weight given to the blue color value. As noted above, the weighted red value is independent of luminance change. In one embodiment, $c_1^{(2)}$ is 0.6667, $c_2^{(2)}$ is 0.3333, $c_3^{(2)}$ is -1.0. In other words, equation (4) can be rewritten as:

$$f_2 = \frac{2r + g - 3b}{3Y}. \tag{5}$$

Please replace paragraph [0033] with the following amended paragraph:

[0033] The software also determines a second ratio between (1) the number of red eye pixels located within a ring 224 having an inner radius of R_{pupil} and an outer radius of <u>1.5*</u>D_{max} and (2) the area of ring 224 in pixels as follows:

$$R_2 = \frac{N_{R_{pupil}/D_{max}}}{A_{R_{pupil}/D_{max}}}, \tag{10}$$

where R_2 is the second ratio, $\cancel{N_{R_{pupil}}}$ $\underline{N_{R_{pupil}/D_{\max}}}$ is the number of red eye pixels within a ring having an inner radius R_{pupil} and an outer radius <u>1.5*</u>D_{max}, and $A_{R_{pupil}/D_{\max}}$ is the area of the circle in the number of pixels.

Please replace paragraph [0038] with the following amended paragraph:

[0038] The software first generates a histogram 262 of the pixels located in a ring 264 about geometric center 206. The function of histogram 262 is simply the number of pixels that has a particular color (e.g., a particular combination of Y,Cr,Cb color values). In one embodiment, ring ~~262~~ 264 has an inner radius of $4*R_{pupil}$ and an outer radius of $9*R_{pupil}$. The software then selects the most common color 266 in histogram 262 and compares it to a range of threshold skin color values. If color 266 is within the range of threshold skin color values, then red eye region 204 is probably a pupil with red eye that is proximate to a facial region. In one embodiment, the threshold skin color values are expressed in HSV (hue, saturation, value) color space as $-80<H<50$, $5<S<80$, and $20<V<80$. Thus, the software first converts the most common color 266 into HSV color space and then compares it with the threshold skin color values. If color 266 is not within the range of threshold skin color values, the software rejects the pixels in red eye region 204 as candidates for red eye removal. In order to remove the luminance change, the luminance (Y) of the image within the circle having radius $9*R_{pupil}$ will be normalized to [0,255] before the software generates histogram 262 and ~~compare~~ compares color 266 to the range of threshold skin color values. This is because without the normalization, any luminance change will introduce a color cast (i.e., unwanted color effect) into the HSV color space.

Please replace paragraph [0040] with the following amended paragraph:

[0040] The software generates a luminance histogram 282 of the pixels located in a ring 284 about geometric center 206. In one embodiment, ring 284 has an inner radius of $2*R_{pupil}$ and an outer radius of $5*R_{pupil}$. From histogram 282, the software determines a ratio between (1) the number of pixels having the brightest color 288 in ring 284 and (2) the number of red eye pixels in a circle 286 having a radius of $2*R_{pupil}$ as follows:

$$R_{sclera} = \frac{N_{brightest}}{N_{\underline{2*}R_{pupil}}}, \qquad (11)$$

where R_{sclera} is the ratio, ~~and~~ $N_{brightest}$ is the number of pixels having the brightest color in ring 284, and $N_{2*R_{pupil}}$ is the number of red eye pixels within circle 286 having radius of $2*R_{pupil}$.